



US007518049B2

(12) **United States Patent**
Beal

(10) **Patent No.:** **US 7,518,049 B2**
(45) **Date of Patent:** **Apr. 14, 2009**

(54) **UNDERWATER CHIME AND METHOD OF USE THEREOF**

(58) **Field of Classification Search** 84/402-404,
84/406, 410
See application file for complete search history.

(76) **Inventor:** **Dale Beal**, 58 Motor Ave., Farmingdale, NY (US) 11735

(56) **References Cited**

(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 635 days.

U.S. PATENT DOCUMENTS

6,417,763 B1 * 7/2002 Petruzzi 340/392.1
7,009,098 B2 * 3/2006 Carter 84/410
2004/0011184 A1 * 1/2004 Prall 84/402

(21) **Appl. No.:** **10/983,815**

* cited by examiner

(22) **Filed:** **Nov. 8, 2004**

Primary Examiner—Kimberly R Lockett
(74) *Attorney, Agent, or Firm*—Myers & Kaplan, LLC; Ashish D. Patel

(65) **Prior Publication Data**

US 2005/0098082 A1 May 12, 2005

(57) **ABSTRACT**

Related U.S. Application Data

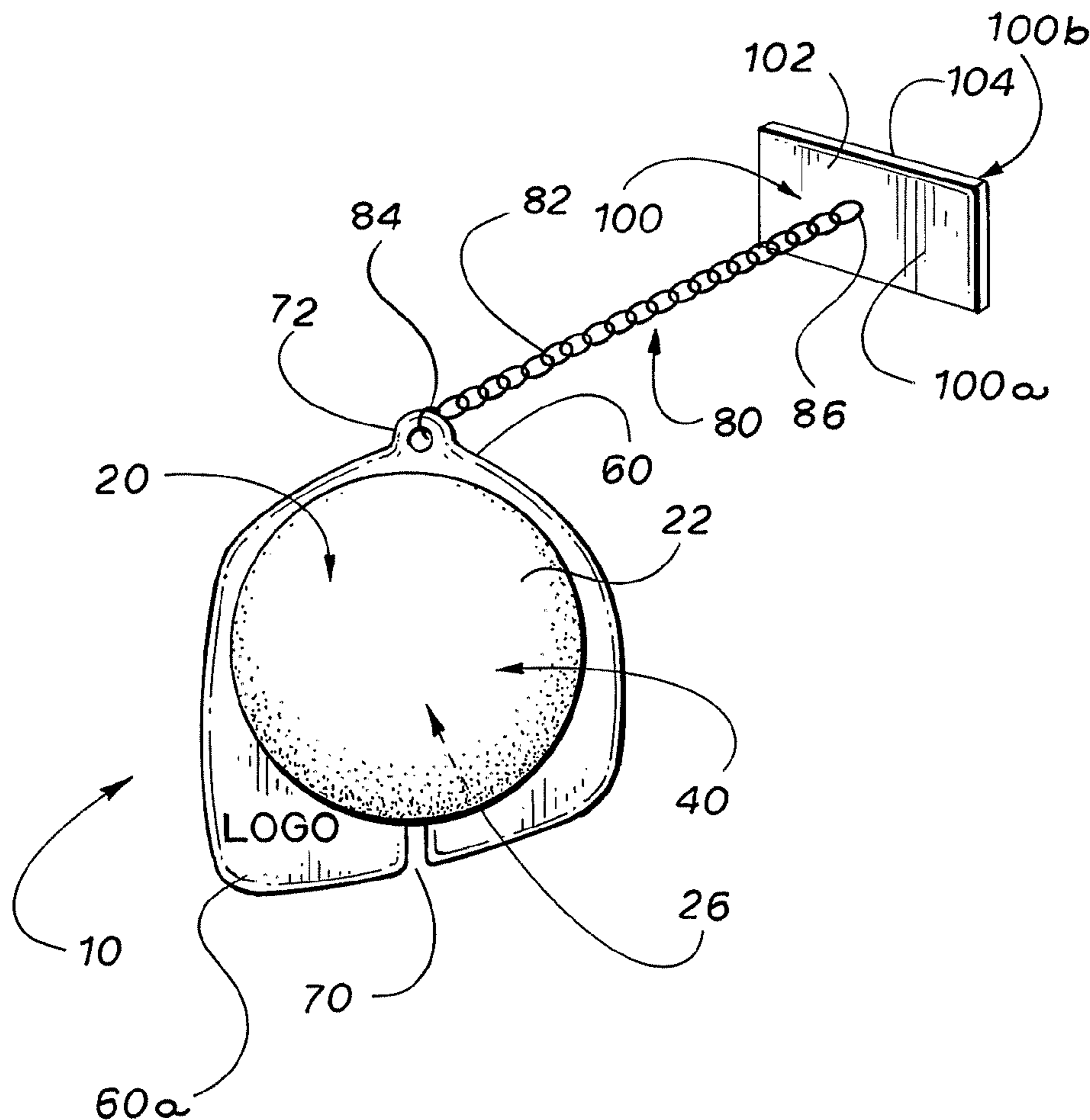
An underwater chime and method of use thereof, wherein the underwater chime functions to enhance the pacifying effect of any swimming pool, whirlpool, jet tub and/or spa environment by effectively transmitting soothing, relaxing and meditative chimes/sound waves throughout the aquatic medium.

(60) **Provisional application No.** 60/518,439, filed on Nov. 7, 2003.

(51) **Int. Cl.**
G10D 3/00 (2006.01)

(52) **U.S. Cl.** **84/402**

15 Claims, 2 Drawing Sheets



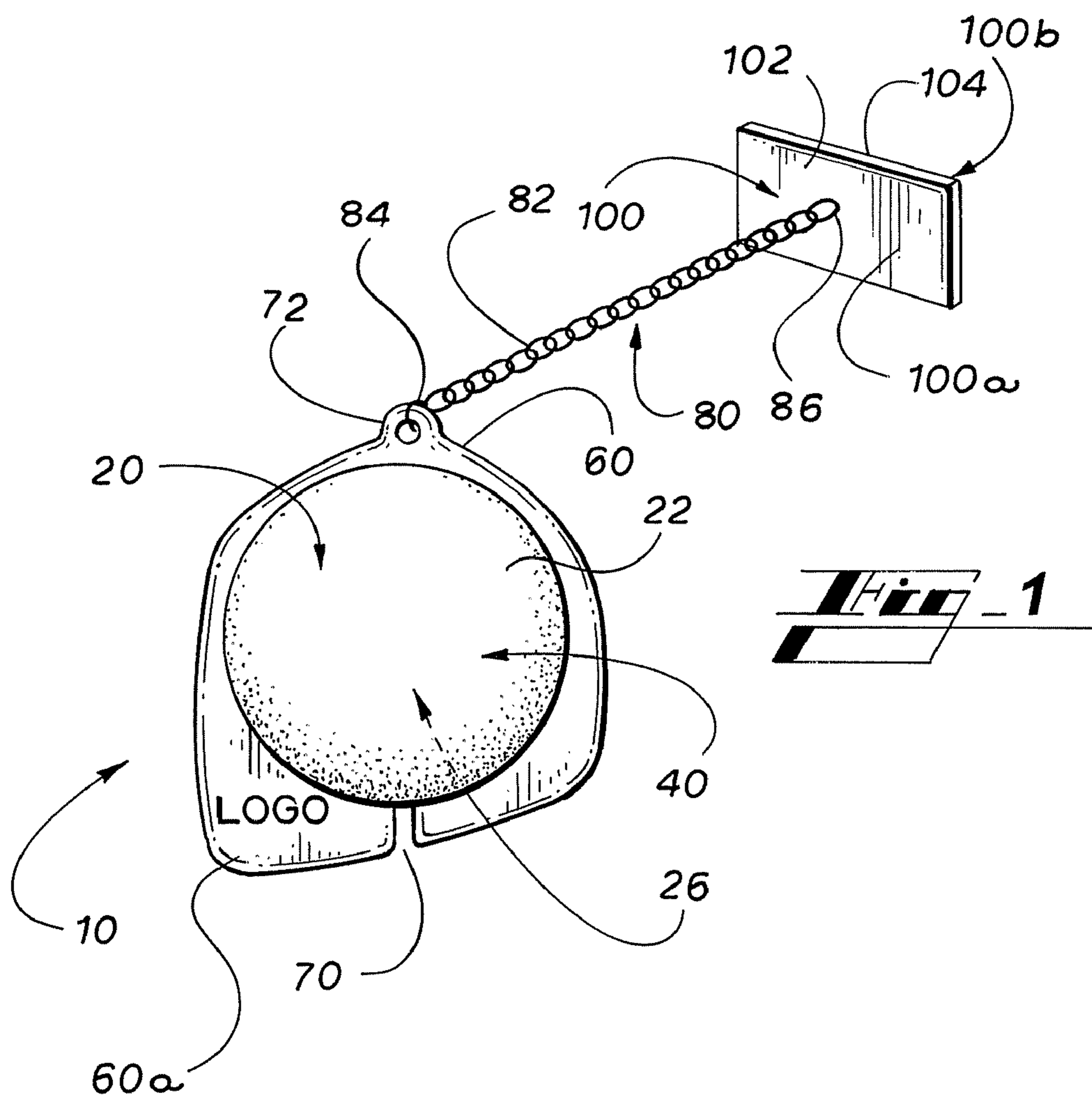


Fig. 1

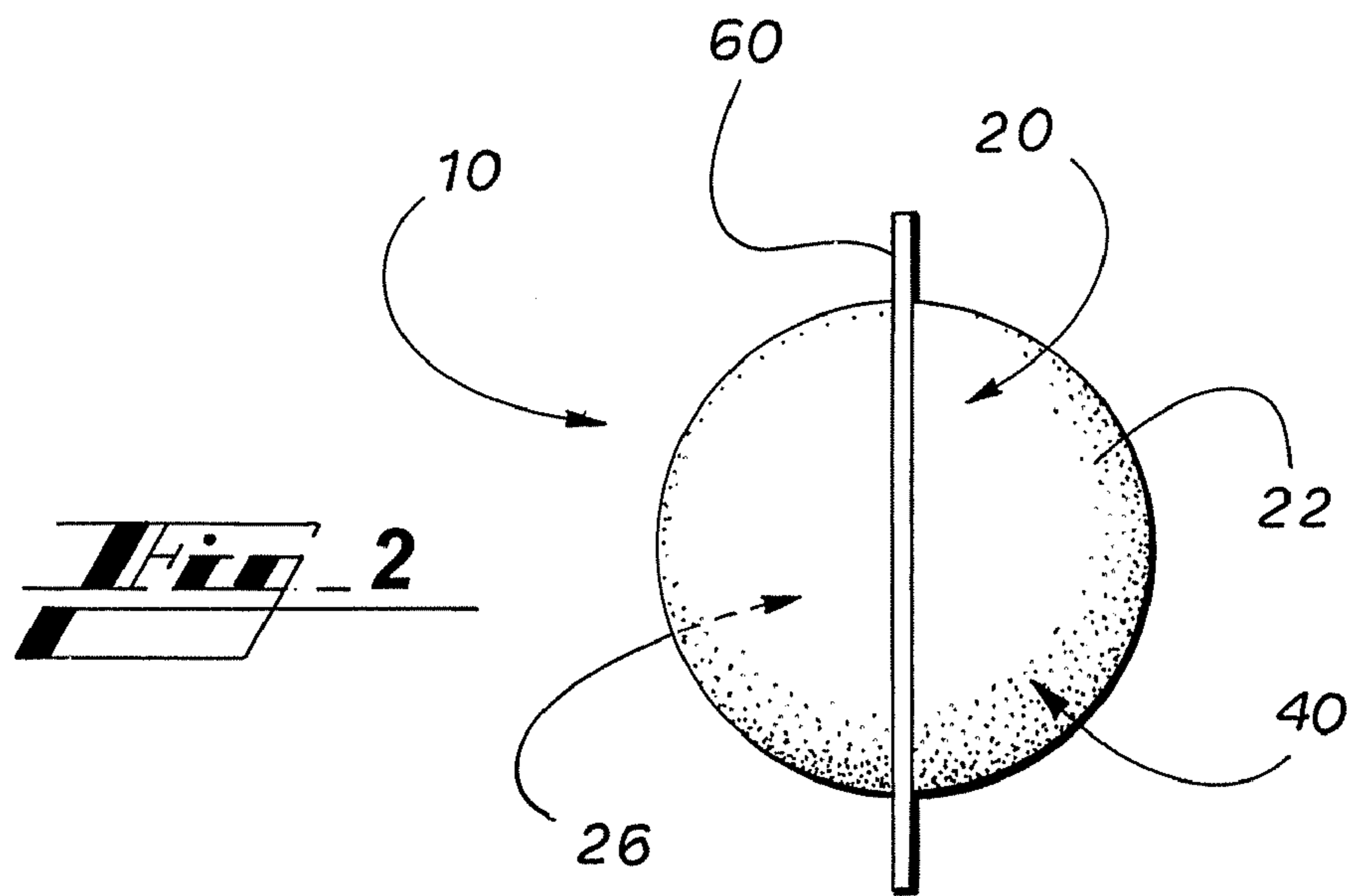
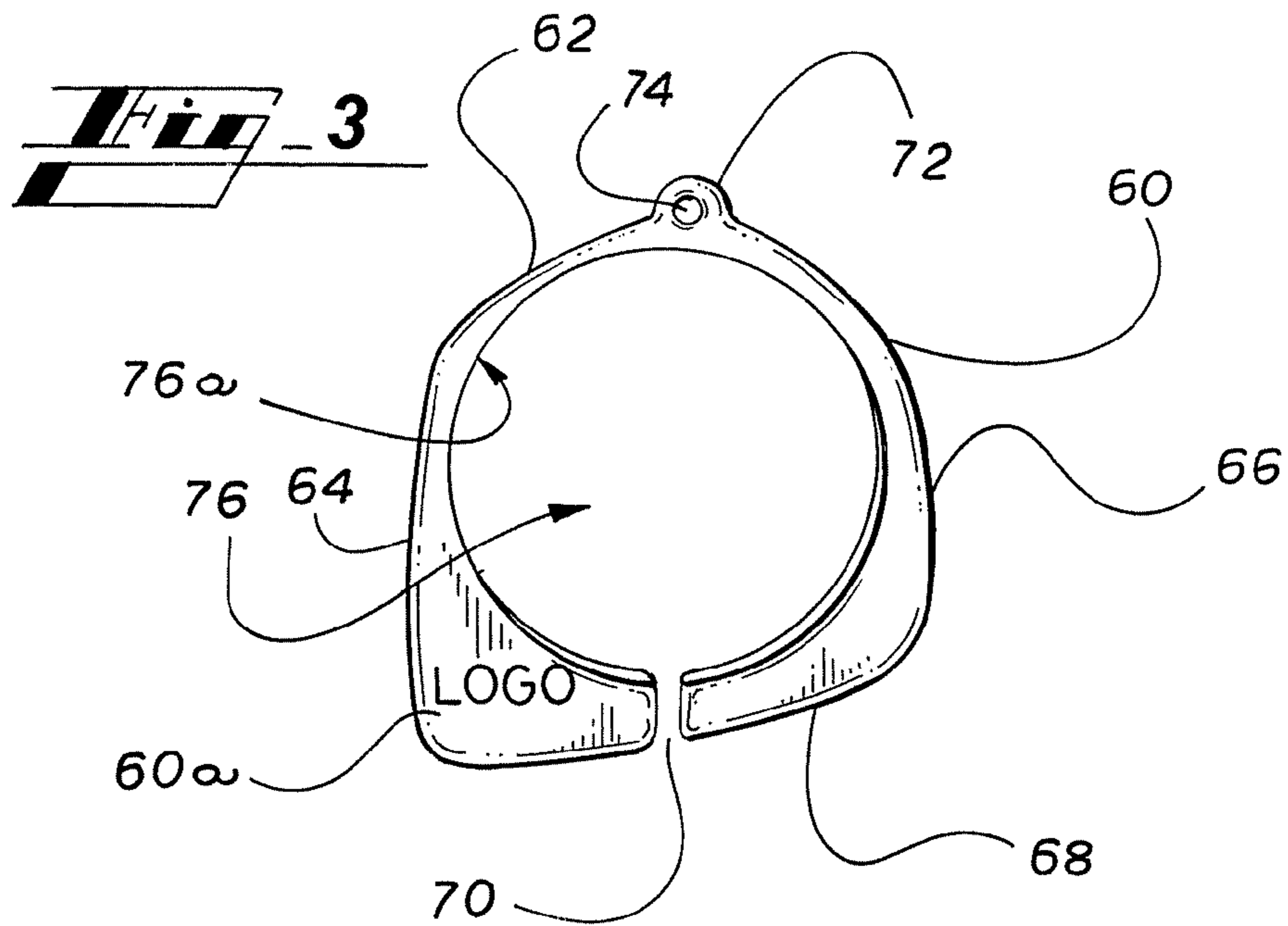


Fig. 2



1**UNDERWATER CHIME AND METHOD OF USE THEREOF****CROSS-REFERENCE AND PRIORITY CLAIM TO RELATED APPLICATIONS**

To the fullest extent permitted by law, the present non-provisional patent application claims priority to and the full benefit of provisional patent application entitled "UNDERWATER CHIME AND METHOD THEREFOR", filed on Nov. 7, 2003, having assigned Ser. No. 60/518,439 wherein said application is incorporated herein by reference.

TECHNICAL FIELD

The present invention relates generally to chimes, and more specifically to an underwater chime and method of use thereof. The present invention is particularly suitable for, although not strictly limited to, creating and conveying relaxing and harmonious chimes throughout a swimming pool, spa, whirlpool and/or the like.

BACKGROUND OF THE INVENTION

Many residential homes and/or public fitness facilities possess swimming pools, jet tubs, whirlpools, spas and/or other aquatic facilities that are typically utilized for a variety of recreational purposes, wherein one such purpose is for relaxation. Specifically, many individuals utilize swimming pools, jet tubs, whirlpools, spas and/or the like for the physically soothing sensation of water against their body and to recuperate after any physically and/or mentally strenuous activity and/or to relieve general bodily fatigue.

Although such pools/spas are therapeutic in themselves, many individuals often incorporate music and/or other soothing sounds offered via a conventional electronic audio system in attempts to further enhance their relaxing pool/spa experience. However, such conventional audio equipment is limited to aboveground or above-pool transmission of sound, and, as such, is generally incapable of effectively transmitting sound waves underwater, as submersion of the electronic audio equipment is not only hazardous, but would likely result in irreparable damage thereto.

Therefore, it is readily apparent that there is a need for an underwater chime and method of use thereof, wherein utilization of such an underwater chime functions to enhance the pacifying effect of any pool and/or spa environment by effectively transmitting soothing, relaxing and meditative chimes/sound waves throughout the aquatic medium.

BRIEF SUMMARY OF THE INVENTION

Briefly described, in a preferred embodiment, the present invention overcomes the above-mentioned disadvantages and meets the recognized need for such a device by providing an underwater chime and method of use thereof, wherein addition of the underwater chime to any pool and/or spa environment significantly enhances the inherent pacifying effect thereof by effectively transmitting and conveying soothing, relaxing and meditative chimes/sound waves therethrough.

According to its major aspects and broadly stated, the present invention in its preferred form is an underwater chime having a chime housing member, a chime mechanism, a fin, a suspension mechanism and a mounting bracket.

More specifically, the present invention is an underwater chime having a chime housing member, a chime mechanism housed within the chime housing member, a fin surrounding

2

the chime housing member and protruding substantially perpendicular therefrom, a suspension mechanism preferably in the form of a chain, wherein one end of the chain is engaged to the fin, and wherein the opposing end of the chain is engaged to a mounting bracket attached proximal to the pool/spa water inlet and/or outlet.

Accordingly, a feature and advantage of the present invention is its ability to significantly enhance a pool/spa user's underwater experience via the transmission of soothing, relaxing and meditative chimes/sound waves therethrough.

Another feature and advantage of the present invention is its ability to generate a continuous, random variety of chime sound during utilization thereof in a pool/spa type setting.

Still another feature and advantage of the present invention is its ability to function without the need of batteries, motors and/or other types of power sources.

Yet another feature and advantage of the present invention is its ability to effectively and substantially uniformly transmit soothing chime sounds throughout most any swimming pools, jet tubs, whirlpools, spas and/or the like.

Still yet another feature and advantage of the present invention is the ability to be expeditiously attached and detached from most any swimming pools, jet tubs, whirlpools, spas and/or the like with substantially ease.

A further feature and advantage of the present invention is its simplicity of design.

Still a further feature and advantage of the present invention is its durability.

Yet a further feature and advantage of the present invention is its ability to function maintenance-free.

These and other features and advantages of the present invention will become more apparent to one skilled in the art from the following description and claims when read in light of the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

The present invention will be better understood by reading the Detailed Description of the Preferred and Alternate Embodiments with reference to the accompanying drawing figures, in which like reference numerals denote similar structure and refer to like elements throughout, and in which:

FIG. 1 is a front perspective view of an underwater chime according to a preferred embodiment of the present invention.

FIG. 2 is a side perspective view of an underwater chime according to a preferred embodiment of the present invention.

FIG. 3 is a front perspective view of the fin of an underwater chime according to a preferred embodiment of the present invention.

FIG. 4 is a perspective view of an underwater chime according to a preferred embodiment of the present invention, showing the device in use.

DETAILED DESCRIPTION OF THE PREFERRED AND ALTERNATIVE EMBODIMENTS

In describing the preferred and alternate embodiments of the present invention, as illustrated in FIGS. 1-4, specific terminology is employed for the sake of clarity. The invention, however, is not intended to be limited to the specific terminology so selected, and it is to be understood that each specific element includes all technical equivalents that operate in a similar manner to accomplish similar functions.

Referring now to FIGS. 1-3, the present invention in its preferred embodiment is a device 10, wherein device 10 is an underwater chime generally preferably having chime housing

member **20**, chime mechanism **40**, fin **60**, suspension mechanism **80** and mounting bracket **100**.

Chime housing member **20** is preferably a ball or sphere **22**, wherein sphere **22** is preferably hollow and preferably formed from a suitable metal or metal alloy such as, for exemplary purposes only, stainless steel, aluminum, brass, bronze, iron, plated or coated metals, or the like, that are preferably resistant to rust, corrosion and/or other typical water damage. Alternatively, sphere **22** may be manufactured from a ceramic material. Although the preferred material of sphere **22** is metal, it is contemplated in an alternate embodiment that other suitable materials could be utilized, such as, for exemplary purposes only, glass and/or glass. It is contemplated in yet another alternate embodiment that chime housing member **20** could be any shape, such as, for exemplary purposes only, oval, square, diamond, pyramidal, cube, rectangular and/or any other desired shape and/or three-dimensional shape.

Preferably housed within hollow interior **26** is chime mechanism **40**, wherein chime mechanism **40** is preferably any suitable chime mechanism as known within the art, such as, for exemplary purposes only, stress-ball chimes and/or bells.

Formed preferably equatorially on sphere **22** is fin **60**, wherein fin **60** is preferably substantially flat and preferably formed from plastic and/or any other suitable material known within the art, such as, for exemplary purposes only, rubber, metal and/or glass. Fin **60** preferably possesses rounded side **62**, first straight side **64**, second straight side **66** and angled side **68**, wherein angled side **68** is preferably formed opposite rounded side **62**, and wherein angled side **68** preferably possesses slit **70** centrally formed therethrough to facilitate placement of fin **60** onto sphere **22** of chime housing member **20**, as more fully described below. Rounded side **62** of fin **60** preferably possesses protuberance **72** formed thereon, wherein protuberance **72** is preferably of the same thickness as fin **60**, and wherein protuberance **72** preferably possesses throughhole **74** centrally formed therethrough for the securement of suspension mechanism **80** thereto, as more fully described below.

Fin **60** further preferably possesses centrally formed aperture **76**, wherein aperture **76** is dimensioned to receive sphere **22** therein, and wherein edge **76A** of aperture **76** is preferably secured to sphere **22** via any suitable securing means known within the art, such as, for exemplary purposes only, epoxies, resins, solder, or integral formation therewith, thus securing fin **60**, in general, to sphere **22**. It is contemplated in an alternate embodiment that edge **76A** of aperture **76** could be dimensioned to be received and seated within a groove formed around the circumference of sphere **22**, thereby securing fin **60** therein.

Fin **60** preferably functions as a fluid flow interrupter, permitting device **10** to bounce and/or twirl about when struck by water expelled through a water outlet and/or taken in via a water inlet of a pool/spa, thus causing chime mechanism **40** to jostle about within sphere **22** and produce a variety of random soothing chime sounds, as more fully described below. Furthermore, area **60A** of fin **60** may receive any selected indicia **60B** thereon, such as, for exemplary purposes only, company logos, designs, holograms, advertisements, textual material, and combinations thereof.

Preferably in secured communication with throughhole **74** of protuberance **72** of fin **60** is end **84** of suspension mechanism **80**, wherein suspension **80** is preferably a ball-type chain **82**, and wherein opposing end **86** of chain **82** is preferably in secured communication with front surface **100A** of mounting bracket **100**. Although suspension mechanism **80** is

preferably a chain **82**, it is contemplated in an alternate embodiment that suspension mechanism **80** could be a string, plastic wire, twine and/or any other suitable suspension mechanism as known within the art. Chain **82** is preferably adjustably positioned through throughhole **74** of protuberance **72** of fin **60** to enable proper positioning of device **10** in front of a water inlet and/or outlet, as more fully described below.

Mounting bracket **100** is preferably a substantially flat member **102**, possessing a securing means **104** for securing mounting bracket **100** to the cap plate of a pool/spa in front of a water inlet and/or outlet, wherein securing means **104** is positioned on rear surface **100B** of mounting bracket **100**, and wherein securing means **104** is preferably a waterproof removable adhesive and/or any other suitable securing means as known within the art, such as, for exemplary purposes only, hook-and-loop fasteners, screws, snap-fit mechanisms and/or the like. Mounting bracket **100** is preferably formed from plastic and/or any other suitable material as known within the art, such as, for exemplary purposes only, metal and/or rubber.

Referring now to FIG. **4**, in use and during non-operation of the pump of pool/spa being treated with device **10**, mounting bracket **100** is preferably secured to the cap plate of a pool/spa in front of a water inlet and/or outlet. Chain **82** is then preferably adjusted via pulling chain **82** through throughhole **74** of protuberance **72** of fin **60** to enable proper positioning of device **10** in front of a water inlet and/or outlet. The pool/spa pump is then preferably reactivated to permit water, either ejected from a water outlet or drawn in by a water inlet, to strike fin **60**, thereby causing device **10** to bounce/twirl about and thus, chime mechanism **40** to jostle about within sphere **22** to produce a variety of random soothing, relaxing and/or meditative chime sounds that are effectively transmitted/conveyed throughout the aquatic medium.

It is contemplated in an alternate embodiment that device **10** could possess any number of fins **60** to increase the turbulence of device **10** within a pool/spa and thus, overall audibility/pitch of chime sounds produced therefrom.

It is contemplated in another alternate embodiment that device **10** could possess other forms of auditory creating mechanisms to produce sounds other than chimes.

It is contemplated in yet another alternate embodiment that device **10** could be employed in any aquatic setting.

It is contemplated in still another alternate embodiment that device **10** could be secured to a pool/spa user to create chime sounds in response to movement of the user through the pool/spa.

It is contemplated in still yet another alternate embodiment that device **10** could dispense with mounting bracket **100**, and be permitted to freely float, alone or within or connected to a suitable floatation device, on the aquatic surface to create chime sounds in response to natural movement the pool/spa waves or ripples.

It is contemplated in a further alternate embodiment that device **10** could be secured to a shallow water and/or deep water diver to create chime sounds in response to movement of the diver through the aquatic body.

It is contemplated in still a further alternate embodiment that device **10** could possess a light mechanism that would activate in response to the chime sounds created by device **10**, thus creating a soothing display of light reflections throughout a pool/spa in accord with the chime sounds.

It is contemplated in yet a further alternate embodiment that fin **60** could be pocket-like/cup-like to assist in the capture of water therein and thus cause the rotation/twirling of device **10** within a pool/spa

5

It is contemplated in still yet a further alternate embodiment that device **10** could be utilized outside an aquatic setting.

Having thus described exemplary embodiments of the present invention, it should be noted by those skilled in the art that the within disclosures are exemplary only, and that various other alternatives, adaptations, and modifications may be made within the scope of the present invention. Accordingly, the present invention is not limited to the specific embodiments illustrated herein, but is limited only by the following claims.

What is claimed is:

1. A chime for use in an aquatic body, said chime comprising:

a chime housing;

a chime creating mechanism;

a fluid flow interrupter, wherein said fluid flow interrupter comprises an indicia disposed thereon, said indicia selected from the group consisting of logos, designs, holograms, advertisements, textual material, and combinations thereof; and,

means for suspending said chime housing below the aquatic body.

2. The chime of claim **1**, wherein said chime housing comprises said chime creating mechanism disposed therein.

3. The chime of claim **2**, wherein said fluid flow interrupter is disposed on said chime housing.

4. The chime of claim **2**, wherein said fluid flow interrupter is a fin disposed on said chime housing.

5. The chime of claim of **4**, wherein said fin interrupts fluid flowing past or over said chime when said chime is disposed below the aquatic body, thereby causing said chime housing to jostle or twirl, and thus said chime creating mechanism to emit a chime sound.

6. The chime of claim **2**, wherein said suspending means is a chain connected to a mounting bracket, said chain further connected to said fluid flow interrupter, wherein said mounting bracket may be utilized to mount said chime to a selected surface.

7. The chime of claim **6**, wherein said mounting bracket may be utilized to mount said chime to a swimming pool wall such that said chime housing is disposed proximate to a water inlet or outlet of the swimming pool, whereby water flowing in or out of the water inlet or outlet, respectively, strikes said fluid flow interrupter and causes said chime housing to jostle or twirl, and thus said chime creating mechanism to emit a chime sound.

8. A method of creating sound waves underwater, comprising the steps of:

6

a. obtaining a chime for underwater use, said chime comprising:

a means for chiming; and,

a fluid flow interrupter; and,

b. positioning said chime in front of a water exchange port of a swimming pool; and,

c. allowing the swimming pool to operate so as to permit the water exchange port to effectuate a forced water current against or over said chime to enable said chiming means to emit chime sounds underwater.

9. The method of claim **8**, further comprising the step of: allowing the forced water current to strike said fluid flow interrupter and cause said means for chiming to emit chime sounds underwater.

10. A chime for use in an aquatic body, said chime comprising:

a chime housing;

a chime creating mechanism;

a fluid flow interrupter; and,

means for suspending said chime housing below the aquatic body, wherein said suspending means is connected to a mounting bracket and to said fluid flow interrupter,

wherein said mounting bracket may be utilized to mount said chime to a swimming pool wall such that said chime housing is disposed proximate to a water inlet or outlet of the swimming pool and suspended thereabout via said suspending means, and whereby water flowing in or out of the water inlet or outlet, respectively, strikes said fluid flow interrupter and causes said chime housing to jostle or twirl, and thus said chime creating mechanism to emit a chime sound.

11. The chime of claim **10**, wherein said chime housing comprises said chime creating mechanism disposed therein.

12. The chime of claim **10**, wherein said fluid flow interrupter is disposed on said chime housing.

13. The chime of claim **10**, wherein said fluid flow interrupter is a fin disposed on said chime housing.

14. The chime of claim of **13**, wherein said fin interrupts fluid flowing past or over said chime when said chime is disposed below the aquatic body, thereby causing said chime housing to jostle or twirl, and thus said chime creating mechanism to emit a chime sound.

15. The chime of claim **10**, wherein said fluid flow interrupter comprises an indicia disposed thereon, wherein said indicia is selected from the group consisting of logos, designs, holograms, advertisements, textual material, and combinations thereof.

* * * * *